P45

고요산혈증이 경피적 관상동맥 중재술 후 급성 신손상과 사망률에 미치는 영향

순천향대학교 천안병원 내과

석수진 · 박상호 · 길효욱 · 이은영 · 신원용 · 홍세용

The Impact of Hyperuricemia on In-Hospital Mortality and Incidence of Acute Kidney Injury in Patients Undergoing Percutaneous Coronary Intervention

Sujin Seok, Sang-Ho Park, Hyo-Wook Gil, Eun-Young Lee, Won-Yong Shin, Sae-Yong Hong

Department of Internal Medicine, Soonchunhyang University Cheonan Hospital

Background: AKI after percutaneous coronary intervention (PCI) is associated with increased 1-year mortality in patients undergoing PCI. Hyperuricemia might be one of the factors deteriorating renal injury. However, there is very little information about the relationship between hyperuricemia, acute kidney injury (AKI) and in-hospital mortality.

Materials/Methods: With a retrospective analysis of the medical records, 1,247 patients who had percutaneous coronary intervention (PCI) were investigated. AKI was defined as an increase in serum creatinine of ≥0.5 mg/dL or ≥50% over baseline within 7 days of PCI. The association of AKI with clinical, biochemical and procedural variables were examined. In addition, the association of hyperuricemia with in-hospital mortality was also examined.

Results: Of the 1,247 patients in the study population, 51 (4.1%) experienced AKI after PCI, 15 of whom required hemodialysis.

In-hospital mortality occurred in 1.6% (20 of 1,247) in 19.6% (10 of 51) of AKI individuals, and 0.8% (10 of 1,186) of the non-AKI participants (odd ratios, 28.927; 95% confidence intervals, 11.411-73.328; $p<0.001$).

In our study, the most powerful predictors of these variables were acute myocardial infarction, baseline estimated glomerular filtration rate (eGFR) <60 ml/min/1.73m^2, diabetics mellitus, anemia and hyperuricemia.

Notably, the incidence of AKI after PCI markedly increased in diabetic or hyperuricemic patients with a baseline eGFR of <60 ml/min/1.73m^2.

Conclusions: It is clear that AKI develops due to multiple risk factors. Our results indicate that hyperuricemia is independently associated with an increased risk of in-hospital mortality and AKI in patients treated with PCI.

Key Words: 고요산혈증; 경피적 관상동맥중재술; 신부전
Hyperuricemia, Percut coronary intervention, Renal failure